



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,369	11/26/2003	Atsushi Hirano	02-53493	1217
79326	7590	05/25/2010		
Fujitsu Patent Center Fujitsu Management Services of America, Inc. 2318 Mill Road, Suite 1010 Alexandria, VA 22314				
EXAMINER				
MILLER, ALAN S				
ART UNIT		PAPER NUMBER		
3624				
NOTIFICATION DATE		DELIVERY MODE		
05/25/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pbrisky@us.fujitsu.com

tauchterlonie@us.fujitsu.com

Office Action Summary

Application No.

10/722,369

Applicant(s)

HIRANO ET AL.

Examiner

ALAN MILLER

Art Unit

3624

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 - 6, 8 - 10, and 12 - 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 - 6, 8 - 10, and 12 - 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed 2/16/2010.
Claims 1, 3 – 6, 8 – 10, and 12 – 13 are pending and have been examined.
This action has been made FINAL.

Response to Amendment

2. Examiner notes amendments to claims 1 - 6 and 10. Said amendments overcome the previous 101 rejections of claims 1 - 6, 8 and 9.

Response to Arguments

3. Applicant's arguments filed 2/16/2010 have been fully considered but they are not persuasive.

Applicant states / argues on pages 9 – 11 of Applicant's response "As acknowledged by the examiner on page 9, lines 10-12 of the Office Action, Jilk et al. does not disclose or suggest, among other things, "if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated, based on the information related to the end date of the training stored in the skill information storage unit", as is recited in independent claim 1. As such, at least these features of claim 1 provide distinctions over Jilk et al.". Page 9, lines 13-20 of the Office Action relies on Casey-Cholakakis et al. as disclosing that a training system tracks end of date training and sends emails when training is required, and stores said information in a database (column 4, lines 33- 55). However, Casey-Cholakakis et al. merely manages a due date for completion of the training program. This due date

merely indicates a target date by which the administrator urges the user to complete the training program. Further, Casey- Cholakakis et al. merely updates the training history of the user, and does not store "an end date of a training which is being received by each worker". The updated training history according to Casey-Cholakakis et al. merely indicates which training has been completed and which training has not been completed. In addition, the asserted combination of Jilk et al. and Casey-Cholakakis et al. does not disclose or suggest, among other things, "extracting by the computer, with respect to each stored work item in response to a work order, worker information related to a worker having a skill capable of performing each work item, based on the skill information of workers stored in the skill information storage unit, and if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated, based on the information related to the end date of the training stored in the skill information storage unit (underlined emphasis added)", as is recited in independent claim 1. Accordingly, the asserted combination of Jilk et al. and Casey- Cholakakis et al. does not disclose or suggest all of the features of each of independent claim 1." Examiner respectfully disagrees.

Jilk discloses the claimed limitation, as interpreted by the Examiner (see below) if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated (see at least column 9, lines 27-68, which discloses a capacity manager in the task management system that can predict projected workloads and worker demand a period into the future. The capacity manager also determines

training regarding task skills based on the required task skills and available workers having the required task skills, and provides said input into a training unit. The capacity manager can also email existing workers to encourage them to certify in new tasks or can recruit new workers if the projected worker requirements cannot be met by the current work force. Jilk determines if no worker has the skills needed, or there are not enough workers with the skills needed for a task, to train or hire new workers that will have the skill capable of performing the predicted work (*i.e. if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated*)). Jilk only does not disclose doing said step based on the information related to the end date of the training. Casey-Cholakis was used to teach the end date of training, and the combination of Jilk and Casey-Cholakis was used to reject the claimed subject matter.

Examiner further notes, in respect to the end date of training, that ¶0112 of the PG PUB 2004/0128189 (the publication of the currently examined invention, page 27 of Applicant's originally filed specification) and ¶0145 of the PG PUB (pages 36 and 37 of Applicant's originally filed specification) discloses that the 'end date of training' is the scheduled end date of the training. This is the equivalent as the target date by which administrator urges the user to complete the training program, as disclosed by Casey-Cholakis, since it is only a scheduled date.

In further respect to the newly amended limitation "and if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated," Examiner notes that this new limitation is unclear. First,

worker information related to a worker having a skill capable of performing each work item is extracted. Then, the claims states that if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated. It is unclear how worker information can be extracted, but at the same time, having no worker information extractable. Further, Examiner notes that the newly amended claims recited optional language, and these optional phrases are conditional limitations with the noted "if" step not necessarily performed. Accordingly, once the positively recited steps are satisfied, the method as a whole is satisfied -- regardless of whether or not other steps are conditionally invocable under certain other hypothetical scenarios. [See: In re Johnston, 77 USPQ2d 1788 (CA FC 2006); Intel Corp. v. Int'l Trade Comm'n, 20 USPQ2d 1161 (Fed. Cir. 1991); MPEP §2106 II C]. For purposes of Examination, Examiner will interpret the claims as if no worker has the skills needed for a task, to look for other workers that will have the skills to do their task because of their future training. And as such, the combination of Jilk and Casey-Cholakis meet that limitation (see Office action below).

Applicant's arguments regarding claims 5, 6 and 10 recite similar arguments as those in regards to claim 1, and are addressed using the same rational as above.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims **1, 3 – 6, 8 – 10, and 12 – 13** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the newly amended limitation ‘and if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated’, however this limitation is unclear. First, worker information related to a worker having a skill capable of performing each work item is extracted. Then, the claims states that if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated. It is unclear how worker information can be extracted, but at the same time, having no worker information extractable. For purposes of Examination, Examiner will interpret the claims as if no worker has the skills needed for a task, to look for other workers that will have the skills to do their task because of their future training. Claims 3 and 4 are rejected as depending from claim 1.

Claim 5 recites the newly amended limitation ‘and if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated’, however this limitation is unclear. First, worker information related to a worker having a skill capable of performing each work item is extracted. Then, the claims states that if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing

said work item by a time when said work item of the work order is generated. It is unclear how worker information can be extracted, but at the same time, having no worker information extractable. For purposes of Examination, Examiner will interpret the claims as if no worker has the skills needed for a task, to look for other workers that will have the skills to do their task because of their future training.

Claim 6 recites the newly amended limitation 'and if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated', however this limitation is unclear. First, worker information related to a worker having a skill capable of performing each work item is extracted. Then, the claims states that if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated. It is unclear how worker information can be extracted, but at the same time, having no worker information extractable. For purposes of Examination, Examiner will interpret the claims as if no worker has the skills needed for a task, to look for other workers that will have the skills to do their task because of their future training. Claims 8 and 9 are rejected as depending from claim 6.

Claim 10 recites the newly amended limitation 'and if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated', however this limitation is unclear. First, worker information related to a worker having a skill capable of performing each work item is extracted.

Then, the claims states that if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated. It is unclear how worker information can be extracted, but at the same time, having no worker information extractable. For purposes of Examination, Examiner will interpret the claims as if no worker has the skills needed for a task, to look for other workers that will have the skills to do their task because of their future training. Claims 12 and 13 are rejected as depending from claim 10.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **1, 5, 6 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jilk et al. (U.S. 7,155,400, hereinafter Jilk) in view of Casey-Cholakakis et al. (U.S. 6,438,353, hereinafter Casey-Cholakakis).

In respect to claim 1, Jilk discloses storing skill information of workers in a skill information storage unit (see column 3, lines 1-10, column 5, lines 37-45, column 6, lines 60-61, and column 11, lines 34-45, which discloses skill information for a worker being stored in a database).

Jilk does not expressly disclose that an end date associated with a received training is stored.

Jilk teaches a task management system that matches employees with tasks based on skills and certification information, included training information. It is old and well known in the art to store a completion date of training, such as a resume containing a graduation date (i.e. *a completion date*) for a degree. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the workers skill information of Jilk, an end date for a training, since the claimed invention is merely a combination of old elements, and one of ordinary skill in the art would have recognized that it would produce a predictable result of more accurately representing that a user has completed a training, thus allowing the system to match only qualified candidates with jobs.

Jilk further discloses storing information of each work item with respect to a work in a work item information storage unit (see column 3, lines 1-10, column 5, lines 49-55, column 7, lines 32-65, and column 16, lines 1-30, which discloses information associated with a work item (task));

storing worker information related to a worker to be registered for each work item in a work information storage unit (see column 3, lines 1-10, column 5, lines 37-55, column 6, lines 60- 61, column 11, lines 18-65, FIG. 4A, and column 15, lines 6-68 through column 16, lines 1-30, wherein worker information that is related to a worker to be registered with tasks is stored);

extracting with respect to each stored work item in response to a work order, worker information related to a worker having a skill capable of performing each work item, based on the skill information of workers stored in the skill information storage unit, (see at least column

2, line 54-column 3, line 10, column 7, lines 32-65, column 15, lines 35- 55 and line 62-column 16, line 29, column 23, lines 40-55, wherein workers are selected for the task based on the skill information stored in the database); and

storing data of the extracted worker with respect to each work item in the work item information storage unit (see at least column 2, line 54-column 3, line 10, column 7, lines 32-65, column 15, lines 35- 55 and line 62-column 16, line 29, column 23, lines 40-55, wherein workers are selected for the task based on the skill information stored in the database).

Jilk further discloses a capacity manager in the task management system that can predict projected workloads and worker demand a period into the future (*i.e. by a time when said work item of the work order is generated*). The capacity manager also determines training regarding task skills based on the required task skills and available workers having the required task skills, and provides said input into a training unit. The capacity manager can also email existing workers to encourage them to certify in new tasks or can recruit new workers if the projected worker requirements cannot be met by the current work force. Jilk determines if no worker has the skills needed, or there are not enough workers with the skills needed for a task, to train or hire new workers that will have the skill capable of performing the predicted work (*i.e. if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated*) (see at least column 9, lines 27-68).

Jilk does not explicitly disclose if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is

generated based on the information related to the end date of the training stored in the skill information storage unit, however Jilk does disclose if no worker information is extractable for a work item as a result of said extracting, extracting worker information related to a worker who will have a skill capable of performing said work item by a time when said work item of the work order is generated (see above).

Casey-Cholakis discloses a training system tracks end of date training and sends emails when training is required, and stores said information in a database (i.e. *information related to an end date of training*) (see at least column 4, lines 33-51, wherein Casey-Cholakis discloses a training system that includes a training program listing including a due date for completion. The training system tracks what training is required for each user and what training has been completed, and further sends emails to users when training is required and automatically updates the user's training history, and storing said information in a database (i.e. *information related to an end date of training*)).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the capacity manager and training unit of Jilk the training system with due dates, required training and automatic training history update in a database of Casey-Cholakis since the claimed invention is merely a combination of old elements, and one of ordinary skill in the art would have recognized that it would produce a predictable result of having the training completion and due dates available in a database to determine which workers will have the required task skills to meet the projected worker requirements by the time they are needed.

Claims 5, 6, and 10 recite substantially similar subject matter to claim 1 and are therefore rejected using the same art and rationale set forth above.

8. Claims 3-4, 8-9, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jilk et al. (U.S. 7,155,400, hereinafter Jilk) in view of Casey-Cholakis et al. (U.S. 6,438,353, hereinafter Casey-Cholakis) in further view of Brodersen et al. (U.S. 6,850,895, hereinafter Brodersen).

As per claim 3, Jilk et al. teaches wherein said extracting extracts worker information of a first worker to actually perform each work item and storing extracted workers in the work information storage section (See column 2, line 54-column 3, line 10, column 7, lines 32-65, column 15, lines 35-55 and line 62-column 16, line 29, column 23, lines 40-55, wherein workers are selected for the task based on the skill information stored in the database). However, Jilk et al. does not expressly disclose that said extracting extracts worker information of a second worker to assist the first worker.

Brodersen teaches extracting worker information of a second worker to assist the first worker (see column 2, lines 28-36 and 55-67, column 4, lines 1-5 and 48-67, column 5, lines 42-60, column 6, lines 27-37, and column 13, lines 10-15, which discloses a rule based system that matches multiple workers to a task, where one worker is a primary worker).

Both Jilk and Brodersen are concerned with matching workers to jobs based on their skill sets. Brodersen specifically discloses assigning multiple workers to the same task, with one worker being the primary worker. It would have been obvious to one of ordinary skill in the art

at the time of the invention to include selecting a second worker for a task in order to more efficiently work on complex tasks using a team of workers (see Brodersen, column 2, lines 28-36).

As per claim 4, Jilk et al. teaches wherein said extracting extracts the worker information of the worker for the work item based on the work having skills comparable to that required of the work item, by referring to the skill information storage section (See column 2, line 54-column 3, line 10, column 7, lines 32-65, column 15, lines 35-55 and line 62-column 16, line 29, column 23, lines 40-55, wherein workers are selected for the task based on the skill information stored in the database). However, Jilk et al. does not expressly disclose extracting worker information of a second worker to assist the first worker, where the second worker has a skill comparable to that of the first worker.

Brodersen discloses extracting worker information of a second worker to assist the first worker, where the second worker has a skill comparable to that of the first worker (See column 2, lines 28-36 and 55-67, column 4, lines 1-5 and 48-67, column 5, lines 42-60, column 6, lines 27-37, and column 13, lines 10-15, which discloses a rule based system that matches multiple workers to a task, where one worker is a primary worker. Both workers have skills that match the job profile, and thus the second worker has a skill comparable to that of the first worker).

Both Jilk et al. and Brodersen are concerned with matching workers to jobs based on their skill sets. Brodersen specifically discloses assigning multiple workers to the same task, with one worker being the primary worker. It would have been obvious to one of ordinary skill in the art at the time of the invention to include selecting a second worker for a task in order to more

efficiently work on complex tasks using a team of workers (see Brodersen, column 2, lines 28-36).

Claims **8 and 9** recite substantially similar subject matter to claims 3 and 4, respectively, and are therefore rejected using the same art and rationale set forth above.

Claims **12 and 13** recite substantially similar subject matter to claims 3 and 4, respectively, and are therefore rejected using the same art and rationale set forth above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Lane (U.S. 2003/0130820) teaches technician skills and comparison to previous work orders to benchmark skill needs.
- b. Sinex (U.S. 2002/0133389) teaches training records and selecting the most skilled technicians to perform maintenance.
- c. Hadden et al. (U.S. 7,181,413) teaches knowledge and skill levels assessment of employees, looking at skill levels before and after training.
- d. McGovern et al. (U.S. 5,918,207) discloses assessing the skill levels of employees and determining and implementing development plans and training.
- e. Kramer et al. (U.S. 2002/0052773) discloses determining the skill rating of a worker and then planning training.

- f. Sisley et al. (U.S. 5,737,728) discloses assigning employees based on the employees skill sets and the needs of the jobs.
 - g. Lesaint et al. (U.S. 6,578,005) teaches allocating resources (i.e. employees) to tasks based on the assignment rules and the skills of a resource.
 - h. Travis et al. (U.S. 2004/0088177) teaches assessing employee skills and job requirements and then determining and managing training for employees.
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN MILLER whose telephone number is (571)270-5288. The examiner can normally be reached on Mon - Fri, 10:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BETH BOSWELL can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M./
Examiner, Art Unit 3624

/Beth V. Boswell/
Supervisory Patent Examiner, Art Unit 3623